

भारतीय मानक  
निष्कर्षण की तैयारी हेतु मार्गदर्शन  
( दूसरा पुनरीक्षण )

*Indian Standard*  
GUIDE FOR PREPARATION OF ABSTRACTS  
( *Second Revision* )

ICS 01.140.20

© BIS 2013

**BUREAU OF INDIAN STANDARDS**  
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG  
NEW DELHI 110002

## FOREWORD

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Documentation and Information Sectional Committee had been approved by the Management and Systems Division Council.

The number of learned periodicals has grown so large in recent years, that a reader has to spend considerable time in glancing through myriads of articles before selecting those really useful to him. Further, there is also the difficulty of having access to all the periodicals. To overcome these difficulties, abstracting periodicals are being published in several subject areas.

It is important that there should be some uniformity in the preparation and presentation of abstracts. Taking these into consideration this standard was first published in 1956 and revised in 1976. This revision has been taken up for making the standard up to date with the changes that have taken place during these years. This standard gives the salient features of indicative, informative and indicative-informative abstracts and also gives guidance for abstracting articles and other learned documents, such as overviews, review articles, theses, and the like.

In this standard, considerable assistance has been taken from the following:

ISO 214 : 1976 Documentation — Abstracts for publications and documentation

ANSI/NISO 239.14-1997 Guidelines for abstracts

It is hoped that these guidelines will facilitate the work of authors, editors and others charged with preparing abstracts, and that the abstracts so prepared will prove more useful to readers.

# *Indian Standard*

## GUIDE FOR PREPARATION OF ABSTRACTS

### ( *Second Revision* )

#### 1 SCOPE

This standard lays down general guidelines for preparation of abstracts.

#### 2 REFERENCES

The following standards contains provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards listed below:

<i>IS No.</i>	<i>Title</i>
2381 (Part 1) :	Information and documentation —
2009/	Bibliographic references: Part 1
ISO 690 : 1987	Content, form and structure
7150 : 1974	Specification for library catalogue and abstract card

#### 3 TERMINOLOGY

For the purpose of this standard, the following definition shall apply.

**3.1 Abstract** — An abstract is defined as an abbreviated, accurate representation of the content of a document. It is usually accompanied by an adequate bibliographical description to enable the original documents to be traced.

#### 4 PURPOSE

The primary purpose of an abstract is to help the users to decide whether the contents of the document are such that they need to read it in full.

NOTE — Secondary publications and services can often make verbatim use of the abstract provided in primary documents, if these abstracts are carefully prepared.

#### 5 TYPES AND CHOICE

**5.1** Abstracts may be broadly divided into two classes, theme oriented and user oriented (slanted). These abstracts can be either indicative or informative (see Annex A for examples) or combination of both.

##### 5.1.1 Informative Abstract

This provides a concise but comprehensive summary of the significant contributions to the knowledge

contained in a document. On many occasions it serves as an adequate substitute for the original for the purpose of obtaining a specific item of information.

NOTE — These types of abstracts are mainly used for analytical studies.

##### 5.1.2 Indicative Abstract

This embodies a general statement of the nature and scope of a document. The primary purpose is to give the reader several clues as to whether or not the information being sought is contained in the original record.

NOTE — These types of abstracts are mainly used for publications like editorials, essays, books, conference proceedings, bibliographies, annual reports, directories, etc.

##### 5.1.3 Informative-Indicative Abstract

In certain cases documents can be partly descriptive and partly informative, for which abstracts shall be a combination of both Informative abstract and Indicative abstract.

#### 5.2 Choice of Abstract

Informative abstracts are especially desirable for texts describing experimental work and documents devoted to a single theme. However, some discursive or lengthy texts, such as overviews, review articles, or theses, may permit the preparation of an abstract that is only an indicative or descriptive guide to the original.

#### 6 GUIDELINES FOR ABSTRACTING

**6.1** An abstract should contain all the essential information, like the nature and purpose of the work, new approach, novel findings, results and conclusions. These essential aspects of the original document should be conveyed in a concise but precise manner. The guidelines given in 6.2 to 6.4.2 are most suitable for informative abstracts. However, for preparing indicative abstracts and informative-indicative abstracts these should be followed to the extent possible.

**6.2** The author's treatment of the subject and the nature of the document should be explained by means of expressions, such as brief, comprehensive, theoretical, experimental, review, survey and case history.

##### 6.3 Context

The purpose, methods, results and conclusions presented in the original document should be stated

without repeating information already conveyed by the title of the document either in that order or with initial emphasis on findings.

### **6.3.1 Purpose**

The primary objectives and scope of the study should be stated unless these are already clear from the title of the document or can be derived from the remainder of the abstract.

### **6.3.2 Methodology**

The techniques or approaches employed should be described, but only to the degree necessary for comprehension. New techniques should be identified clearly and the basic methodological principle, the range of operation, and the accuracy obtained should be described.

### **6.3.3 Results and Conclusions**

Results and conclusions should be clearly presented. They may be abstracted jointly to avoid redundancy.

## **6.4 Presentation**

The main findings should be highlighted indicating the advance in knowledge. It should not contain evaluation or criticism of the material abstracted. However, obvious errors and omissions may be indicated.

### **6.4.1 Data**

In the case of scientific publications where new data are presented the presence of the data should be specifically indicated in the abstract.

### **6.4.2 Collateral Information**

Findings or information incidental to the main purpose of the study but of value to other subject areas should be included, for example, modification of methods, new instruments, new compounds, newly determined physical constants, and newly discovered documents or data sources. Their relative importance may not be exaggerated in the abstract.

**6.4.2.1** Notwithstanding this, in slanted abstracts, the stress may be given to the collateral information when the abstract is meant for the secondary publication devoted to the specific subject field.

### **6.4.3 Additional Information**

Presence of tables, illustrations, and references should be indicated within parentheses at the end of the abstract. This information may be given in abbreviated form, for example, 4 tab, 5 fig., 10 ref, etc.

**6.4.4** The address of the author should be mentioned. In case there is more than one author working at different places, preferably the address of the first

author may be given after the names of the authors, unless otherwise specified.

#### **NOTES**

**1** The address of the organization should be given in case the author is affiliated to an organization.

**2** E-mail address should also be given.

## **6.4.5 Bibliographical Reference**

The bibliographical reference should precede the text of the abstract and conform to the requirements of IS 2381.

## **7 STYLE**

**7.1** Generally accepted rules for good writing are also applicable to the writing of abstracts. Clarity and concise expression characterize a good abstract. The abstract should be intelligible in itself without there being need to refer to the document abstracted.

### **7.2 Language**

Simple sentences should be used for abstracts. The abstracts should be accurate, concise, and unambiguous.

**7.2.1** The first sentence of an abstract should not name the type of document (for example 'This paper reviews', 'The study presents', etc), since the information is inferred from the title or text of the abstract.

**7.2.2** Without prejudice to precision or clarity, complete sentence need not always be used.

**7.2.3** Use of passive voice and present tense may be preferred for indicative abstracts, while active voice and past tense may be preferred in case of informative abstracts. However, conclusions should be written in present tense.

**7.2.4** Abbreviations/acronyms commonly understood or easily intelligible in the context may be used.

**7.2.5** Standard nomenclature should be used. Unfamiliar terms, abbreviations, and symbols should be defined the first time they occur in the abstract.

**7.2.6** Trade jargon and colloquialism should be avoided.

**7.2.7** Both overuse and awkward omission of articles should be avoided.

NOTE — The above rules are illustrative not exhaustive.

**7.3** The abstract should be written in a single paragraph, except when the abstract is very long.

## **8 PLACEMENT**

**8.1** Abstract(s) should precede the text of the article.

**8.2** In case there are more than one abstract, abstracts

in languages other than the language of the article should be placed immediately after the abstract given in the language of the article.

## 9 FORMAT

It is desirable to present the abstract and its

bibliographical citation in format suitable for documentation cards. In case abstract cards are used, they should conform to IS 7150. Maximum printing dimensions of 70 × 100 mm will permit use of card sizes of either 74 × 105 mm (A7) or 75 × 125 mm (International library catalogue cards).

## ANNEX A

(Clause 5.1)

### EXAMPLES OF DIFFERENT TYPES OF ABSTRACTS

#### A-1 SCIENCE AND TECHNOLOGY

**A-1.1** Examples of the different types of abstracts for the following article are given below:

CHAKRABORTI S K, KUNDU N (Chemotherapy Department, Chittaranjan Das Cancer Research Centre, Calcutta-26) : Pyrimidinodiguanidines as potential anticancer drugs : Synthesis of N<sub>1</sub> (5-uracil)-N<sub>5</sub>-substituted diguanidines. Indian J Cancer 1967, 4 (4), 409-11.

##### *Informative abstract*

Six diguanidines substituted at 5 positions, have been synthesized as potential anticancer drugs, by condensing 5-aminouracil with substituted cyanoguanidines. Uracil was nitrated with fuming HNO<sub>3</sub>, and H<sub>2</sub>SO<sub>4</sub> and the 5-nitrouracil was reduced to the corresponding 5-aminouracil. Substituted cyanoguanidines prepared by reacting dicyandiamide with different aromatic amines, were condensed with 5-aminouracil to obtain the required pyrimidinodiguanidines. The constitution of these compounds were confirmed by their elemental analysis, UV absorption maxima at 260 mμ and the formation of characteristic coloured complexes with Cu and Ni salts. The aqueous solution of hydrochlorides of the diguanidines were used for biological testing. Their toxicity to mice was: LD<sub>50</sub>, 300 mg/kg body weight by IP injection and 40 mg/kg body weight by IV injection. Little anti-tumour activity has been observed with N<sub>1</sub>-(5-uracil)-N<sub>5</sub>-p-chlorophenyldiguanidine.

##### *Indicative abstract*

Six N<sub>1</sub>-(5-uracil)-N<sub>5</sub>-substituted diguanidines have been synthesized and their constitution confirmed. A preliminary observation on the biological properties of these compounds is also reported. One of the compounds showed some anti-tumour activity.

##### *Slanted abstract for chemistry*

Synthesis of the following substituted diguanidines is reported: N<sub>1</sub>-(5-uracil) diguanidine (I); N<sub>1</sub>-(5-uracil)-N<sub>5</sub>-phenyldiguanidine (II); N<sub>1</sub>-(5-uracil)-N<sub>5</sub>-p-methyl phenyldiguanidine (III); N<sub>1</sub>-(5-uracil)-N<sub>5</sub>-p-methoxy phenyldiguanidine (IV); N<sub>1</sub>-(5-uracil)-N<sub>5</sub>-p-chlorophenyldiguanidine (V); and N<sub>1</sub>-(5-uracil)-N<sub>5</sub>-p-nitrophenyldiguanidine (VI). Uracil was nitrated with fuming HNO<sub>3</sub> and H<sub>2</sub>SO<sub>4</sub>, and the 5-nitrouracil was reduced to 5-aminouracil. Substituted cyanoguanidines were prepared by reacting dicyandiamide with different aromatic amines according to the procedure of Curd et al (with Trop Med 1945, 39, 208-16). A mixture of 10 m mole, of 5-aminouracil, 10 m mole of the cyanoguanidine in 10 ml of water was heated under reflux after adding 1 ml (approximately 10 m mole.) of concentrated HCl, for 2-10 h. The pyrimidinodiguanidines were deposited as crystal hydrochlorides on cooling the mixture overnight. The mother liquor on treatment with (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>, gave further crop of the product as normal sulphates. The constitution of these compounds were

confirmed by their elemental analysis, UV maxima at 260  $\mu$ , as well as by their ability to form characteristics

colour complex with Cu and Ni salts. Particulars of these compound are listed below:

<i>Compound</i>	<i>mp</i>	<i>Reaction Time</i> h	<i>Yield</i> Percent	<i>Formula</i>
I	350°	2	88	$C_6H_9O_2N_7.HCl$
II	235°	2	85	$C_{12}H_{13}O_2N_7.HCl$
III	243°	4	70	$C_{13}H_{15}O_2N_7.HCl$
IV	242°	3	78	$C_{13}H_{15}O_3N_7.HCl$
V	265°	4	82	$C_{12}H_{12}O_2N_7.Cl.HCl$
VI	275°	10	48	$C_{12}H_{12}O_4N_8.HCl$

A preliminary observation on the biological properties of these compound showed compound (V) to have little anti-tumour activity.

#### *For Medicine*

Six  $N_1$ -(5-uracil)- $N_5$ -substituted diguanidines have been prepared as possible anticancer agents. The aqueous solution of hydrochlorides of the diguanidines were tested for their biological properties. Their toxicity to mice was av. LD<sub>50</sub>, 300 mg/kg body weight by IP injection and 40 mg/kg weight by IV injection. No significant change in the leucocyte count in the peripheral blood was seen on admining. some of these compound 50 mg/kg body weight, IP for 6 days. In another set of experiment little anti-tubour activity was seen in the compd.  $N_1$ -(5-uracil)- $N_5$ -p-chlorophenyl-diguanidine, when it was adminind. 15 mg/kg body weight, IV daily for 6 days, 24 h after transplantation with Schwartz leukemia solid variety on strain A inbred male mice. Compared to control, in 30% cases the survival time increased slightly and the nodule decreased though not significantly.

#### *Indicative-Informative Abstract*

RAO K S, NEELIMA SATYAM (Civil Engineering Department, Indian Institute of Technology Delhi, New

Delhi 110016): Liquefaction studies for seismic microzonation of Delhi Region.

After the devastating 2001 Bhuj earthquake, the national capital region of Delhi has attracted major attention with several scientific studies in recent times. This region, being in zone-IV, has experienced many earthquakes in the past and recent times. It also faces the danger of severe seismic threat from the central himalayan seismic gap. Seismic microzonation, which is a subdivision of an area into micro zones depending upon site-specific seismic response, is an effective mitigation effects such as land sliding, lateral spreading, or large ground settlement. The phenomenon of liquefaction of soil had been observed for many years, but was brought to the attention of engineers after the Niigata (1964) and Alaska (1964) earthquakes. Since Delhi falls in the area with high seismic probability, there is need for the assessment of liquefaction potential. An extensive geotechnical borehole database has been prepared after compiling more than 1 200 boreholes at various locations of Delhi, along with geological and seismological details. In this article, with the collected borehole data an attempt is made to assess in details the liquefaction potential of soils using SPT-based methods and also to present a liquefaction hazard map.

## Bureau of Indian Standards

BIS is a statutory institution established under the *Bureau of Indian Standards Act*, 1986 to promote harmonious development of the activities of standardization, marking and quality certification of goods and attending to connected matters in the country.

## Copyright

BIS has the copyright of all its publications. No part of these publications may be reproduced in any form without the prior permission in writing of BIS. This does not preclude the free use, in the course of implementing the standard, of necessary details, such as symbols and sizes, type or grade designations. Enquiries relating to copyright be addressed to the Director (Publications), BIS.

## Review of Indian Standards

Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the latest issue of 'BIS Catalogue' and 'Standards : Monthly Additions'.

This Indian Standard has been developed from Doc No.: MSD 05 (0387).

### Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

### BUREAU OF INDIAN STANDARDS

#### Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002

Telephones : 2323 0131, 2323 3375, 2323 9402

Website: [www.bis.org.in](http://www.bis.org.in)

#### Regional Offices:

#### Telephones

Central	: Manak Bhavan, 9 Bahadur Shah Zafar Marg NEW DELHI 110002	{ 2323 7617 2323 3841
Eastern	: 1/14 C.I.T. Scheme VII M, V. I. P. Road, Kankurgachi KOLKATA 700054	{ 2337 8499, 2337 8561 2337 8626, 2337 9120
Northern	: SCO 335-336, Sector 34-A, CHANDIGARH 160022	{ 260 3843 260 9285
Southern	: C.I.T. Campus, IV Cross Road, CHENNAI 600113	{ 2254 1216, 2254 1442 2254 2519, 2254 2315
Western	: Manakalaya, E9 MIDC, Marol, Andheri (East) MUMBAI 400093	{ 2832 9295, 2832 7858 2832 7891, 2832 7892

**Branches:** AHMEDABAD. BANGALORE. BHOPAL. BHUBANESHWAR. COIMBATORE. DEHRADUN. FARIDABAD. GHAZIABAD. GUWAHATI. HYDERABAD. JAIPUR. KANPUR. LUCKNOW. NAGPUR. PARWANOO. PATNA. PUNE. RAJKOT. THIRUVANANTHAPURAM. VISAKHAPATNAM.